

## U.S. Army Research Institute for the Behavioral and Social Sciences

### **Research Report 1922**

# Evaluating a Job Aid for Tactical Site Exploitation at the Joint Readiness Training Center

Kenneth L. Evans
U.S. Army Research Institute

Major Joshua A. Snyder First Sergeant Frederick Carmicle Joint Readiness Training Center

### **April 2010**

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## U.S. Army Research Institute for the Behavioral and Social Sciences

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BARBARA A. BLACK, Ph.D.

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MICHELLE SAMS, Ph.D.

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REPORT DOCUMENTATION PAGE							
1. REPORT DATE (dd-mm-yy) April 2010	2. REPORT TYPE Final	3. DATES COVERED (from to) July 2008 - October 2009					
4. TITLE AND SUBTITLE  Evaluating a Job Aid for Tac	•	5a. CONTRACT OR GRANT NUMBER					
the Joint Readiness Training Center		5b. PROGRAM ELEMENT NUMBER 622785					
6. AUTHOR(S) Kenneth L. Evans (U.S. Arn	,	5c. PROJECT NUMBER A790					
MAJ Joshua A. Snyder and 1SG Frederick Carmicle (Joint Readiness Training Center)		5d. TASK NUMBER 215					
		5e. WORK UNIT NUMBER					
7. PERFORMING ORGANIZATION NAM U.S. Army Research Institut Fort Benning Research Unit P.O. Box 52086 Fort Benning, GA 31995-20	e	8. PERFORMING ORGANIZATION REPORT NUMBER					
<ol> <li>SPONSORING/MONITORING AGENCY</li> <li>Army Research Institute the Sciences</li> </ol>		10. MONITOR ACRONYM ARI					
ATTN: DAPE-ARI-IJ		11. MONITOR REPORT NUMBER					
2511 Jefferson Davis Highway Arlington, VA 22202-3926		Research Report 1922					

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES

Subject Matter POC: Kenneth L. Evans

14. ABSTRACT (Maximum 200 words):

The present investigation sought to quantify small unit tactical site exploitation (TSE) practices at the Joint Readiness Training Center (JRTC) and to determine the extent to which an existing job performance aid, the TSE Smart Card, might improve unit TSE performance. Unit TSE practices were measured by trainers/mentors using the TSE Checklist, a tool developed especially for the investigation. Over the course of nine unit rotations at JRTC, 518 checklists were collected and analyzed. The TSE Smart Card was found to positively influence unit performance in the areas of TSE background, planning, execution, and follow-up. Unit strengths and weaknesses in TSE operations were identified. Overall, units that rehearsed their TSE plans were significantly more likely to take advantage of TSE opportunities, to conduct TSE operations in a timely manner, and to orchestrate TSE in accordance with the combat situation.

#### 15. SUBJECT TERMS

Tactical Site Exploitation Joint Readiness Training Center Job Performance Aids Company Intelligence Support Teams Biometric Identification Equipment

SECUF	RITY CLASSIFICATION	ON OF	19. LIMITATION OF ABSTRACT	20. NUMBER OF PAGES	21. RESPONSIBLE PERSON Ellen Kinzer
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified	Unlimited	36	Technical Publication Specialist (703) 602-8049

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Kenneth L. Evans U.S. Army Research Institute

Major Joshua A. Snyder First Sergeant Frederick Carmicle Joint Readiness Training Center

ARI-Fort Benning Research Unit Scott E. Graham, Chief

U.S. Army Research Institute for the Behavioral and Social Sciences 2511 Jefferson Davis Highway, Arlington, Virginia 22202-3926

### **April 2010**

Army Project Number 622785A790

Personnel, Performance and Training Technology

Approved for public release; distribution is unlimited.

#### ACKNOWLEDGMENT

The authors express their grateful appreciation to the members of JRTC's Warrior Leadership Council and the trainer/mentors who collected data during the investigation, which would not have been possible without their diligent efforts. We also want to express our continued appreciation to ARI's Liaison Officer at JRTC, SMA (R) Bill Gates. Not only did he carefully shepherd the on-site collection of our data, but his wise council helped us to improve our measurement instrument, the Tactical Site Exploitation Checklist, and overall research plan.

## EVALUATING A JOB AID FOR TACTICAL SITE EXPLOITATION AT THE JOINT READINESS TRAINING CENTER

#### **EXECUTIVE SUMMARY**

#### Research Requirement:

The need to investigate small unit tactical site exploitation (TSE) operations at the Joint Readiness Training Center (JRTC) was recognized by members of JRTC's Warrior Leadership Council. Operating under the direction of the Deputy Commander of the Operations Group, the Council consists of representatives from each Operations Group division, as well as the 1<sup>st</sup> Battalion (Airborne) 509<sup>th</sup> Infantry, the Center for Army Lessons Learned, the Research, Development and Engineering Command (RDECOM), and the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). The primary purpose of the Council is to leverage the expertise of JRTC trainer/mentors (T/Ms), in order to identify and prioritize the most serious small unit leadership and training deficiencies found across rotations.

A frequent topic of discussion in after action reviews (AARs) of unit performance at JRTC, TSE operations were viewed as one of the most common and widespread of all problems identified by the Council since its inception in 2004. The identification of this need led to the present investigation, the purpose of which was twofold. First, the Council wanted to determine the overall prevalence of various small unit TSE practices at JRTC, in an attempt to pinpoint those areas of TSE operations in which units have the greatest difficulty. Second, the Council wanted to evaluate the effectiveness of a job performance aid, the *TSE Smart Card* (GTA 17-09-001). Specifically, they wanted to know if units given these tactical pocket guides at the beginning of their rotation would subsequently exhibit better TSE performance than units that were not given the guides.

#### Procedure:

The Warrior Leadership Council developed the TSE Checklist as a measurement tool for T/Ms to use in gauging the TSE performance of battalions, companies, and platoons during force-on-force missions and situational training exercises (STXs) at JRTC. The checklist measured 51 unit performance tasks in four TSE areas: unit background, planning, execution, and follow-up. The Council then compared the TSE performance of units that were given copies of the *TSE Smart Card*, the experimental group, to the TSE performance of earlier units that had not received the *TSE Smart Card*, the baseline group. Baseline data were drawn from 249 checklists collected by T/Ms during five consecutive unit rotations in 2008 and early 2009. Experimental data were drawn from 269 checklists collected during four later rotations in 2009.

#### Findings:

Over the span of nine rotations, most units performed relatively well in the areas of TSE execution (e.g., performing searches) and follow-up (e.g., avoiding deviation from mission

accomplishment). In fact, eight of the 10 strongest TSE tasks were found in these two areas. In contrast, units tended to have their greatest difficulty in the areas of background (e.g., having a site exploitation checklist) and planning (e.g., including a site survey in their TSE plan). Eight of the ten weakest TSE tasks were found in the latter two areas. The *TSE Smart Card* appeared to have a positive effect on the TSE operations of units receiving them, across all four areas of TSE performance. Units in the experimental group performed better than baseline units on 42 of the 51 TSE measures (82%). Statistically significant group differences were found on 27 of these measures (53%).

#### Utilization and Dissemination of Findings:

Findings were briefed to members of the JRTC Warrior Leadership Council in October of 2009. Based on the results obtained in the present investigation, both the authors and members of the Council recommend continued use of the *TSE Smart Card* for units training at JRTC, as well as for units conducting TSE training at their home station. The continued use of the TSE Checklist at JRTC is also recommended, so T/Ms can systematically gather supporting TSE data to use in their AARs. In particular, it is recommended that the checklist be included in the next printing of JRTC's *T/M Handbook*.

## EVALUATING A JOB AID FOR TACTICAL SITE EXPLOITATION AT THE JOINT READINESS TRAINING CENTER

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## EVALUATING A JOB AID FOR TACTICAL SITE EXPLOITATION AT THE JOINT READINESS TRAINING CENTER

#### Introduction

Tactical site exploitation (TSE) refers to the hasty or deliberate actions a unit takes to ensure that personnel, documents, electronic data, and other material are identified, collected, protected, and evaluated in order to facilitate follow-on actions (Center for Army Lessons Learned, 2007). The purpose of TSE is to answer information requirements, provide intelligence for future operations, and provide evidence to support legal proceedings in the host nation. Successful TSE operations involve the coordinated performance of numerous individual and collective tasks, such as mission planning, site security, site recording, tactical questioning, searching (e.g., personnel, equipment, vehicles, buildings, and open areas), evidence collection, biometric data collection, information dissemination, and debriefing. At the small unit level, TSE operations are conducted by designated teams of unit personnel that have typically received some supplemental training in the above tasks (see Asymmetric Warfare Group, 2007; Center for Army Lessons Learned, 2007; National Ground Intelligence Center, 2007; U.S. Army Armor Center, 2008; U.S. Army Training and Doctrine Command, 2006; U.S. Department of the Army, 2002, 2006a, 2006b).

The need to investigate unit TSE practices at the Joint Readiness Training Center (JRTC) was recognized by members of JRTC's Warrior Leadership Council. Operating under the direction of the Deputy Commander of the Operations Group, the Council consists of representatives from each Operations Group division, as well as the 1<sup>st</sup> Battalion (Airborne) 509<sup>th</sup> Infantry, the Center for Army Lessons Learned, the Research, Development and Engineering Command (RDECOM), and the U.S. Army Research Institute for the Behavioral and Social Sciences. The primary purpose of the Council is to leverage the expertise of JRTC trainer/mentors (T/Ms) in order to identify and prioritize the most serious small unit leadership and training deficiencies found across rotations (U.S. Army Research Institute for the Behavioral and Social Sciences, 2005).

A frequent topic of discussion in after action reviews (AARs) of unit performance at JRTC, TSE was the fourth problem area investigated by the Warrior Leadership Council since its inception in 2004. Earlier Council investigations dealt with troop leading procedures (Evans & Baus, 2006), unit information management practices (Evans, Reese, & Weldon, 2007), and casualty evacuation procedures (Evans, Coerper, & Johnson, 2009). In its investigation of unit TSE practices, Council members believed TSE performance on the objective to be highly uneven across units. While some units had a good understanding of TSE operations and performed those operations effectively, others were generally unprepared to conduct TSE, as they had no plan for TSE operations, lacked any standing operating procedures (SOPs) to support TSE, and had no currently trained TSE teams.

To address these problems the Council began collecting data on unit TSE practices in November of 2008, using a T/M measurement instrument called the TSE Checklist (see Appendix A). Described in detail in the Research Approach section of this report, the checklist's design and content were based on the TSE doctrine contained in four U.S. Army field manuals

(U.S. Army Training and Doctrine Command, 2006; U.S. Department of the Army, 2002, 2006a, 2006b).

One purpose of the present investigation was to determine the overall prevalence of various small unit TSE practices during force-on-force and situational training exercise (STX) missions at JRTC, in an attempt to pinpoint those areas of TSE operations in which units have the greatest difficulty. In particular, Council members wanted to determine the reasons why some units experience confusion in their execution of TSE operations and why some fail to identify and process important pieces of intelligence information on the battlefield.

A second purpose of the investigation was to evaluate, in a field environment, the effectiveness of a job performance aid that small unit leaders could use in the planning and conduct of TSE operations. Fortunately, a number of good TSE job aids have already been developed, including the *Tactical Site Exploitation Handbook* (Center for Army Lessons Learned, 2007), the *Tactical Site Exploitation Guide for Coalition Forces* (Asymmetric Warfare Group, 2007), the *Site Exploitation Quick Reference Guide* (National Ground Intelligence Center, 2007), and the *Tactical Site Exploitation Smart Card* (U.S. Army Armor Center, 2008). The Council chose to evaluate the latter, as it had the most up-to-date content of the four job aids and was relatively simple in its design, which could facilitate local reproduction in the future. Specifically, the Council wanted to determine if units given the *TSE Smart Card* at the beginning of their rotations would subsequently exhibit better TSE performance than units that were not given the *TSE Smart Card*.

Job performance aids have a rich history of organizational application, especially in the military (see Schultz & Wagner, 1981; Swezey, 1987; U.S. Department of the Army, 1999). In fact, earlier JRTC investigations have found support for the efficacy of job aids that were developed to improve troop leading procedures, information management, and casualty evacuation (Evans & Baus, 2006; Evans, Coerper, & Johnson, 2009; Evans, Reese, & Weldon, 2007).

#### **Research Approach**

The TSE Checklist was developed by JRTC's Warrior Leadership Council as a measurement tool for T/Ms to use in gauging the TSE performance of battalions, companies, and platoons during force-on-force and STX missions at JRTC. The Council then selected the *TSE Smart Card* (U.S. Army Armor Center, 2008) for evaluation as a job performance aid that could potentially help small unit leaders plan and execute TSE operations. In evaluating the effectiveness of the *TSE Smart Card*, the TSE performance of units that were given these guides, the experimental group, was compared to the TSE performance of units that had not received the guides, the baseline group. Five consecutive baseline rotations were followed by four subsequent experimental rotations. Although it would have been better to counterbalance or alternate the order of experimental and baseline unit rotations, the Council believed it would have been too difficult to execute a counterbalanced design flawlessly, given the highly decentralized nature of the data collection effort across JRTC Operations Group divisions.

#### Sample

Baseline TSE data were drawn from 249 TSE Checklists completed by T/Ms during five consecutive JRTC rotations. Experimental TSE data were then drawn from 269 TSE Checklists completed during four subsequent rotations. Over these nine rotations, 1.8% of the checklists were collected from battalions, 17.0% from companies, and 81.3% from platoons. Overall, 47.6% of the observed missions were force-on-force missions and 52.4% were STX missions. The baseline and experimental groups did not differ significantly in terms of the echelons and mission types observed.

However, the two groups were found to be significantly different in terms of the types of units observed [ $\chi^2(4, N=475)=9.60$ , p=.048]. These unit differences are shown in Table 1. The most notable differences between groups were a higher percentage of Field Artillery units in the baseline group and a higher percentage of Infantry units in the experimental group. Although statistically significant, these differences were relatively small in terms of absolute percentages, the largest being the 8.2 percentage point difference between Infantry units in the two groups. In addition, the two groups differed significantly in terms of the types of TSE operations they conducted [ $\chi^2(1, N=419)=8.64$ , p=.003]. Planned TSE operations were more prevalent in the baseline group (69.5%) than in the experimental group (55.5%), compared with opportunity TSE operations.

Table 1
Percentage of Checklists Collected from Various Types of Units in the Baseline and Experimental Groups

	Group					
Type of Unit	Baseline $(n = 224)$	Experimental $(n = 251)$				
Infantry	56.3%	64.5%				
Cavalry	8.9%	8.4%				
Field Artillery	10.7%	4.8%				
RSTA	4.9%	7.6%				
Other	19.2%	14.7%				
Total	100.0%	100.0%				

*Notes.* RSTA = Reconnaissance, Surveillance, and Target Acquisition. Types of units that comprised less than 5% of the total sample were grouped into a category called Other.

#### **Tactical Site Exploitation Checklist**

Unit TSE practices were measured by T/Ms using the TSE Checklist (see Appendix A). Printed on the front and back of a yellow card that was approximately 8½ in. tall and 5 in. wide (22 x 13.4 cm), the TSE Checklist was organized into five sections. Section I asked T/Ms for some general information, including the dates of observation, the type of unit observed, the unit's echelon, the type of mission conducted, and the type of TSE operation observed.

Section II dealt with the TSE background of unit personnel, focusing on their general knowledge and preparedness to conduct TSE operations. Specifically, the checklist asked if the unit knew and understood TSE operations, if they had currently trained TSE teams, and if they had an SOP for TSE operations. T/Ms were also asked to list any references used in the establishment of the SOP, to note whether or not it included sample forms for various TSE tasks (e.g., site surveys and spot reports), and to note if the TSE responsibilities of key leaders were identified. Lastly, Section II asked if the unit had a site exploitation checklist, if Soldiers knew how to perform TSE, and if unit TSE equipment was packed and readily available for use.

Section III dealt with TSE planning. In particular, the checklist asked about the thoroughness of TSE plans and whether or not TSE was included in the unit's overall mission planning process. T/Ms were asked if TSE plans were rehearsed, if the communications plan was rehearsed, if the unit developed and disseminated primary intelligence requirements (PIR), and if the unit coordinated with other units in their area of operations (AO). Additionally, T/Ms were asked whether or not pre-combat checks (PCCs) and pre-combat inspections (PCIs) of TSE kits were performed, and whether or not a debriefing plan existed. Finally, Section III asked T/Ms if unit personnel understood their mission plans, including differences between planned and opportunity TSE operations.

Section IV focused on the execution of TSE operations. Following questions about the observed combat situation, available TSE opportunities, and surrounding conditions, T/Ms were asked if units did a site survey and assessment, made a site recording, and followed their TSE SOP. They were also asked about whether interpreters and host nation forces were integrated, whether methodical searches were performed, and whether detainees were searched, tactically questioned, and enrolled in the Handheld Interagency Identity Detection Equipment System (HIIDES). Other Section IV items asked about searching and securing vehicles, as well as collecting and processing evidence. Lastly, T/Ms were asked if TSE operations were executed in a timely manner and if the unit orchestrated TSE in accordance with the combat situation (i.e., Operation Enduring Freedom vs. Operation Iraqi Freedom).

Section V was devoted to follow-up operations. Specifically, T/Ms were asked if TSE teams were debriefed, if collected packets were reviewed for completeness, and if the collected information was processed and disseminated. They were also asked whether detainees were properly processed and whether data from the HIIDES was downloaded into the Biometric Automated Toolset System (BATS). Similar to questions found on previously developed JRTC checklists (Evans & Baus, 2006; Evans, Coerper, & Johnson, 2009; Evans, Reese, & Weldon, 2007), T/Ms were then asked whether TSE operations interfered with mission accomplishment and whether friction points were observed between the unit and higher echelons. Lastly, T/Ms were asked to list TSE tasks the unit should sustain and those they should improve.

Most questions on the TSE Checklist called for a Yes or No response. The Warrior Leadership Council chose this response scale for two reasons. First, they thought a Yes/No format would be relatively easy to use, minimizing the data collection burden on T/Ms. Second, the Council believed this format would lower the amount of subjectivity contained in the checklist data, by simply asking T/Ms whether or not particular TSE practices occurred, rather than asking them to decide how good those practices were.

Largely in response to T/M feedback about checklist usability, the TSE Checklist was revised after the first baseline rotation. These revisions included some item deletions, item additions, and changes to item wording. The final version of TSE Checklist, shown in Appendix A, was used exclusively during the second baseline rotation and all subsequent rotations. The results reported herein were based solely on items contained in the final version of the checklist.

#### **Tactical Site Exploitation Smart Card**

The *TSE Smart Card* was developed by the Directorate of Training, Doctrine, Combat Development and Experimentation at the U.S. Army Armor Center (U.S. Army Armor Center, 2008). Designed as a tactical pocket reference, it was printed in color on both sides of one 18 x 11 in. sheet (45.7 x 27.9 cm). It contained 16 separate panels that, when folded, created a 16 page document that was 5½ in. tall and 4½ in. wide. Its illustrated content summarized a variety of TSE topics, including the following:

- TSE Responsibilities
- Packing Checklist
- Site Sketch
- Material Collection
- Evidence Custody
- Tactical Questioning
- Witness Statements
- Personnel Processing
- Handling Detainee Materiel
- Enemy Prisoner of War (EPW) Tagging
- Biometrics Collection
- Mission Debriefing

#### **Procedure**

Through their JRTC Operations Group divisions, T/Ms were issued blank TSE Checklists prior to each baseline and experimental rotation. Completed checklists were then collected at several centralized locations after each rotation had ended. In most instances, an interim analysis of the findings for each rotation was completed and presented to members of the Warrior Leadership Council prior to the beginning of the next rotation.

TSE Smart Cards were obtained from the U.S. Army Armor Center and distributed to units in the four experimental rotations at the beginning of each rotation. Specifically, the TSE Smart Cards were provided by Warrior Leadership Council members to the battalion leadership and they were encouraged to distribute them down to platoon level. While most Council members believed they were thoroughly distributed down to company level, it was unclear how well the guides were distributed to platoons.

No attempt was made to keep T/Ms blind regarding the experimental condition in effect for each rotation (i.e., baseline vs. experimental). T/Ms on the Warrior Leadership Council

should certainly have been aware of the experimental condition in effect, as they were responsible for *TSE Smart Card* distribution. However, other T/Ms may have been unaware of the experimental conditions, as their data collection role did not change in any way across baseline and experimental rotations. The TSE research plan developed by the Council and approved by the Deputy Commander and Command Sergeant Major of the JRTC Operations Group is shown in Appendix B.

It should be noted that the present investigation was conducted simultaneously with an ongoing Army and JRTC initiative to establish and train Company Intelligence Support Teams (CoISTs). Described more fully by Sanders (2009), CoISTs are typically trained through a five-day program conducted by a Mobile Training Team (MTT) approximately three months prior to their unit's scheduled rotation at JRTC. Because MTTs disseminate training materials, including TSE materials, during their training programs, it is possible baseline units had access to the *TSE Smart Card* and other TSE references prior to and during their JRTC rotations. Conversely, it is also entirely possible that some experimental units did not actually use the *TSE Smart Cards* provided to them during this investigation. Thus, real differences between the baseline and experimental groups in terms of job aid usage may have been less than intended. In an attempt to address this potential problem, an item was included on the TSE Checklist that asked T/Ms to list any TSE references they observed being used to develop unit TSE SOPs. This checklist item would enable the TSE performance of units that used TSE references (i.e., the aforementioned job aids and MTT training materials) to be compared with the TSE performance of those units that did not use TSE references, regardless of their experimental group assignments.

#### **Results**

The organization of this section closely parallels the general layout of the TSE Checklist (see Appendix A). Analyses of the results for individual items were based on the calculation of descriptive statistics (i.e., frequency distributions). Chi-square tests were also performed for each item, as well as when the relationship between two items was of interest (e.g., how rehearsals were related to the timeliness of TSE operations). Each analysis was based on the maximum sample size of checklists available for that analysis; thus, sample sizes varied somewhat across analyses due to missing checklist data.

#### **Unit Background in Tactical Site Exploitation Operations**

Section II of the TSE Checklist dealt with the TSE background of unit personnel, reflecting their potential degree of preparation for the successful conduct of TSE operations. Nine background tasks were measured nominally (yes vs. no). In general, these background tasks are best performed at a unit's home station, prior to arriving at JRTC. Ideally, one would want baseline and experimental group units to be roughly equivalent in terms of their background characteristics, in order to make any resulting group differences in TSE planning and execution more clearly interpretable. Unfortunately, this did not happen.

Results for the nine TSE background tasks are shown in Table 2. Units in the experimental group performed better than baseline units on seven of the nine tasks, with statistically significant (p < .05) group differences found on six tasks. Experimental units were significantly more likely to have clearly understood TSE operations, to have currently trained TSE teams, to have used references in establishing their TSE SOP, to have personnel that knew how to perform TSE, and to have had their TSE equipment packed and readily available. Baseline units were significantly more likely to have leader responsibilities identified in their TSE SOP. Overall, these results suggested that experimental units were better prepared to conduct TSE operations than baseline units. One should keep this advantage in mind as the remaining results of the investigation are presented.

Table 2
Percentage of Baseline and Experimental Group Units Performing Nine Background Tasks

	Group Percentage					
Background Task	Baseline	Experimental	df	n	$\chi^2$	p
Unit clearly understood TSE operations	61.5	72.3	1	514	6.71	.010
Had currently trained TSE teams	47.0	63.9	1	518	15.07	.001
Had SOP for TSE operations	28.1	32.5	1	517	1.15	.282
Sample forms included <sup>a</sup>	69.1	62.8	1	154	.67	.412
Leader responsibilities indentified <sup>a</sup>	69.6	54.4	1	172	3.99	.046
References used to establish SOP	18.3	25.6	1	503	3.91	.048
Had site exploitation checklist	26.1	30.2	1	510	1.04	.308
Soldiers knew how to perform TSE	58.0	69.8	1	507	7.78	.005
TSE equipment packed and available	54.2	63.4	1	505	4.43	.035

*Note*. Tasks with significantly different group percentages are shaded.

#### **Planning**

Section III of the TSE Checklist sought to determine whether or not units performed a series of 18 planning tasks. Results are summarized in Table 3. A higher percentage of experimental units completed 14 of the 18 tasks, with statistically significant (p < .05) group differences on eight tasks. Specifically, units in the experimental group were significantly more likely than baseline units to have included TSE in their mission plans, to have plans for both planned and opportunity TSE operations, to have plans for site security, to have a communications plan, to have TSE kits available, to have a plan for debriefing, and to have personnel who understood their TSE mission, as well as personnel who understood the difference between planned and opportunity TSE missions. Overall, these results suggested that units in the experimental group generally made better plans for TSE operations than units in the baseline group.

<sup>&</sup>lt;sup>a</sup>For those units having an SOP for TSE operations.

Table 3
Percentage of Baseline and Experimental Group Units Performing 18 Planning Tasks

	Group	Percentage				
Planning Task	Baseline	Experimental	df	n	$\chi^2$	p
TSE included in mission plans	46.7	61.6	1	509	11.30	.001
Planned and opportunity TSE included	49.2	59.2	1	506	5.14	.023
Site security included	27.0	35.9	1	503	4.56	.033
Site survey included	13.9	20.1	1	503	3.34	.067
Site recording included	21.3	28.6	1	503	3.53	.060
Evidence collection included	35.7	40.9	1	503	1.48	.224
Item transport/turnover included	19.3	25.9	1	503	3.13	.077
Detainee handling included	51.9	53.5	1	497	.14	.706
Rehearsals included TSE operations	29.9	29.5	1	502	.01	.927
PIR developed and disseminated	52.1	44.7	1	502	2.77	.096
Had a communications plan	67.5	78.1	1	503	7.14	.008
Communications plan rehearsed <sup>a</sup>	28.0	32.5	1	367	.85	.356
TSE kits were available	70.3	85.4	1	500	16.79	.001
PCCs/PCIs of kits performed <sup>b</sup>	56.0	48.7	1	392	2.04	.153
Coordinated with other units in AO	35.8	32.0	1	499	.80	.372
Had a plan for debriefings	48.6	61.3	1	504	8.26	.004
Personnel understood TSE mission	46.1	58.1	1	501	7.24	.007
Planned vs. opportunity TSE understood	47.9	57.1	1	499	4.25	.039

*Notes*. Tasks with significantly different group percentages are shaded. AO = Area of Operations, PCC = Pre-Combat Check, PCI = Pre-Combat Inspection, PIR = Primary Intelligence Requirements.

#### **Execution**

Section IV of the TSE Checklist sought to determine whether or not units executed a series of 16 TSE tasks. Results are summarized in Table 4. A higher percentage of experimental units completed 13 of the 16 tasks, with statistically significant (p < .05) group differences on eight tasks. In particular, units in the experimental group were significantly more likely than baseline units to have identified the situation for TSE operations, to have taken advantage of TSE opportunities, to have done a survey and assessment of the site, and to have made a recording of the site. Similarly, experimental units were significantly more likely to have followed their TSE SOP, to have the Handheld Interagency Identity Detection Equipment System (HIIDES) available, to have executed TSE operations in a timely manner, and to have orchestrated TSE operations in accordance with the appropriate combat situation (i.e., Operation Enduring Freedom vs. Operation Iraqi Freedom). Overall, these results indicate that units in the experimental group generally executed their TSE operations better than units in the baseline group.

<sup>&</sup>lt;sup>a</sup>For those units having a communications plan.

<sup>&</sup>lt;sup>b</sup>For those units having TSE kits available.

Table 4
Percentage of Baseline and Experimental Group Units Performing 16 Execution Tasks

	Group	Percentage				
Execution Task	Baseline	Experimental	df	n	$\chi^2$	p
Situation identified for TSE operations	69.2	82.3	1	494	11.61	.001
Took advantage of TSE opportunities	51.5	60.6	1	493	4.20	.040
Conditions set for TSE operations	72.3	72.4	1	481	.00	.997
Surveyed and assessed the site	26.5	37.8	1	471	6.80	.009
Site was recorded	25.7	46.2	1	490	22.25	.001
SOP followed (in units with an SOP)	55.7	71.7	1	162	4.48	.034
Interpreters and IA/ANA integrated	76.0	75.9	1	486	.00	.984
Searches performed	87.1	91.2	1	484	2.13	.145
Methodical, detailed, and professional <sup>a</sup>	53.0	53.0	1	432	.00	.988
Detainees searched and questioned	66.2	74.2	1	471	3.55	.060
HIIDES available	77.6	92.5	1	489	21.37	.001
Detainees enrolled in the HIIDES <sup>b</sup>	71.2	75.6	1	418	1.05	.306
Vehicles secured and searched properly	53.2	52.4	1	445	.28	.868
Evidence collected and processed	45.3	52.2	1	485	2.29	.130
TSE executed in a timely manner	43.6	53.0	1	489	4.25	.039
TSE orchestrated IAW combat situation	60.1	75.0	1	477	12.13	.001

*Notes*. Tasks with significantly different group percentages are shaded. ANA = Afghan National Army, IA = Iraqi Army, IAW = In Accordance With, HIIDES = Handheld Interagency Identity Detection Equipment System.

#### **Follow-up Operations**

Section V of the TSE Checklist sought to determine whether or not units executed a series of eight TSE follow-up tasks. Results are summarized in Table 5. A higher percentage of experimental units completed each of the eight tasks, with statistically significant (p < .05) group differences on six tasks. Specifically, units in the experimental group were significantly more likely than baseline units to have debriefed their TSE teams, to have reviewed collected packets for completeness, and to have properly processed and turned over their detainees and EPWs. Similarly, experimental units were significantly more likely to have a Company Intelligence Team, to have their collected information processed and disseminated, and to have pursued TSE operations without deviating from the accomplishment of their mission.

<sup>&</sup>lt;sup>a</sup>For those units conducting searches.

<sup>&</sup>lt;sup>b</sup>For those units having the HIIDES available.

Table 5
Percentage of Baseline and Experimental Group Units Performing Eight Follow-up Tasks

	Group Percentage					
Follow-up Task	Baseline	Experimental	df	n	$\chi^2$	p
Teams were debriefed	31.9	51.2	1	480	18.37	.001
Collected packets reviewed	25.8	39.3	1	460	9.54	.002
Detainees properly processed	38.9	59.1	1	448	18.24	.001
HIIDES data downloaded into BATS <sup>a</sup>	52.1	60.0	1	294	1.80	.180
Unit had a Company Intelligence Team	66.3	80.7	1	457	12.23	.001
Information processed and disseminated	46.7	67.1	1	456	19.42	.001
No deviation from mission due to TSE	79.8	91.1	1	481	12.49	.001
Friction with higher echelons avoided	75.6	76.1	1	435	.02	.895

*Notes*. Tasks with significantly different group percentages are shaded. HIIDES = Handheld Interagency Identity Detection Equipment System, BATS = Biometric Automated Toolset System.

#### **Strengths and Weaknesses**

A total of 51 nominal measures of TSE task performance were included in the present investigation. Of these, nine were related to a unit's TSE background, 18 were related to the planning of TSE operations, 16 were related to the execution of TSE operations, and eight were related to TSE follow-up. Across all baseline and experimental units observed, the 10 TSE tasks with the highest completion percentages are shown in Table 6, while the 10 tasks with the lowest completion percentages are shown in Table 7.

Table 6
Ten Tasks with the Highest Unit Completion Percentages

TSE Task	Type of Task	n	Percentage
Searches performed	Execution	484	89.3
No deviation from mission due to TSE	Follow-up	481	85.7
HIIDES available	Execution	489	85.3
TSE kits were available	Planning	500	78.2
Interpreters and IA/ANA forces integrated	Execution	486	75.9
Situation identified for TSE operations	Execution	494	75.9
Friction with higher echelons avoided	Follow-up	435	75.9
Unit had a Company Intelligence Team	Follow-up	457	74.2
Detainees or EPWs enrolled in the HIIDES	Execution	418	73.7
Had a communications plan	Planning	503	73.0

*Notes.* Tasks are shown in descending order of completion percentage. ANA = Afghan National Army, EPW = Enemy Prisoner of War, IA = Iraqi Army, HIIDES = Handheld Interagency Identity Detection Equipment System.

<sup>&</sup>lt;sup>a</sup>For those units having the HIIDES available and having enrolled detainees in the HIIDES.

Table 7
Ten Tasks with the Lowest Unit Completion Percentages

TSE Task	Type of Task	n	Percentage
Site survey included in plan	Planning	503	17.1
Item transport/turnover included in plan	Planning	503	22.7
Site recording included in plan	Planning	503	25.0
Had site exploitation checklist	Background	510	28.2
Rehearsals included TSE operations	Planning	502	29.7
Had SOP for TSE operations	Background	517	30.4
Communications plan rehearsed	Planning	367	30.5
Site security included	Planning	503	31.6
Surveyed and assessed the site	Execution	471	32.3
Collected packets reviewed for completeness	Follow-up	460	32.8

*Note*. Tasks are shown in ascending order of completion percentage.

#### **Rehearsals and Mission Accomplishment**

A unit's propensity to conduct rehearsals was found to have a strong positive relationship with mission accomplishment in previous JRTC research (Evans & Baus, 2006; Evans, Coerper, & Johnson, 2009; Evans, Reese, & Weldon, 2007). In contrast to previous research, however, a unit's failure to conduct TSE operations on the objective might not have an immediate negative impact on mission accomplishment. For example, it is entirely possible that a failure to conduct comprehensive TSE might actually enhance short-term mission accomplishment, as units could spend less time on the objective prior to follow-on operations. In the present investigation, 82.6% of the all units conducting rehearsals pursued TSE operations without deviating from mission accomplishment, compared with 86.7% of units not conducting rehearsals. This difference was not statistically significant [ $\chi^2(1, N = 476) = 1.37, p = .242$ ].

Although TSE rehearsals did not enhance mission accomplishment, they were found to have a number of other advantages. For example, 75.7% of the units conducting rehearsals had timely TSE operations, compared with 36.7% of units not conducting rehearsals. This difference was highly significant statistically [ $\chi^2(1, N = 483) = 62.37, p = .0001$ ]. Similarly, 79.6% of units conducting rehearsals took advantage of their TSE opportunities, compared with 45.9% of units not conducting rehearsals. This difference was also highly significant statistically [ $\chi^2(1, N = 487) = 47.34, p = .0001$ ]. Finally, it was found that 88.1% of units conducting rehearsals performed TSE that was appropriate for the combat situation, compared with 58.8% of units not conducting rehearsals. This was another highly significant statistical difference between the two groups [ $\chi^2(1, N = 471) = 39.03, p = .0001$ ].

#### **Plan Completeness**

A measure of TSE plan completeness was created from the seven plan characteristics mentioned in Questions 2-4 of Section III on the TSE Checklist (see Appendix A). Ranging from zero to seven, plan completeness scores were computed by simply counting the number of

characteristics found in each unit's TSE plan. Units with higher plan completeness scores were found to have a significantly greater likelihood of conducting TSE operations that were appropriate for the combat situation [ $\chi^2(7, N = 473) = 114.42, p = .0001$ ]. For example, 100% of the units with a plan completeness score of 7 had TSE operations appropriate for the combat situation, compared with 33.1% of units having a plan completeness score of 0.

Plan completeness was also found to be significantly related to the timeliness of TSE operations [ $\chi^2(7, N = 485) = 86.77, p = .0001$ ] and to the likelihood that a unit took advantage of its TSE opportunities [ $\chi^2(7, N = 489) = 105.80, p = .0001$ ]. For example, 72.2% of the units with a plan completeness score of seven conducted timely TSE operations, compared with 20.6% of units having a plan completeness score of zero. Similarly, 75.0% of the units with a plan completeness score of seven took advantage of their TSE opportunities, compared with 22.8% of units having a plan completeness score of zero.

#### Job Aid Usage

As mentioned previously, units in the baseline group could have used TSE job aids they acquired on their own or from CoIST MTTs. Conversely, there was no guarantee that units in the experimental group would actually use the *TSE Smart Cards* provided to them during the present investigation. To address this methodological problem, the TSE performance of 111 baseline and experimental group units that were observed to have used a job aid like the *TSE Smart Card*, or any of the others mentioned in the Introduction (see page 2), was compared to the performance of 392 baseline and experimental group units that were not observed to have used any TSE job aids.

Job aid usage was found to be significantly related to the timeliness of a unit's TSE operations [ $\chi^2(1, N = 475) = 15.58$ , p = .0001], to the likelihood they took advantage of their TSE opportunities [ $\chi^2(1, N = 478) = 8.35$ , p = .004], and to the likelihood their TSE operations were appropriate for the combat situation [ $\chi^2(1, N = 463) = 14.37$ , p = .0001]. In fact, 65.1% of the units using job aids had timely TSE operations, compared with 43.4% of those that did not. Similarly, 67.6% of units using job aids took advantage of their TSE opportunities, compared with 51.7% of those that did not. Further, 82.4% of units using job aids conducted TSE operations appropriate for the combat situation, compared with 62.3% of those that did not.

In addition, job aid usage was found to be significantly related to the completeness of a unit's TSE plans [ $\chi^2(7, N = 489) = 39.06, p = .0001$ ]. For example, 76.1% of the units using job aids were found to have plan completeness scores of two or more, compared with 48.9% of units not using job aids.

#### **Discussion**

One purpose of the present investigation was to determine the overall prevalence of various unit TSE practices during JRTC training missions, in an attempt to pinpoint those areas in which units have the greatest difficulty. Based on the combined results from nine JRTC rotations, several areas of relative weakness were found (see Table 7). Six of the 10 weakest

TSE tasks were related to TSE planning (e.g., including a site survey in the TSE plan). These results suggest the greatest improvement in unit TSE performance may come from concentrating training efforts in the area of TSE planning. Using the *TSE Smart Card*, or other TSE job aids, did help in this regard. Probably the one thing that units can do to better perform TSE operations at JRTC is to do a better job of planning and rehearsing their TSE operations. Units that rehearsed their TSE plans were significantly more likely to have had timely TSE operations, to have taken advantage of their TSE opportunities, and to have performed TSE operations that were appropriate for the combat situation. Areas of relative strength were also found (see Table 6). Eight of the 10 strongest TSE tasks were related to either TSE execution or follow-up (e.g., performing searches or avoiding deviations from mission accomplishment).

A second purpose of the investigation was to evaluate the effectiveness of the *TSE Smart Card* in the planning and conduct of TSE operations. Overall, units that were given these job aids at the beginning of their rotations were more likely than baseline units to have successfully completed 42 of the 51 TSE tasks measured (82%). Statistically significant group differences were found on 27 of these tasks (53%). These differences were found across all four types of TSE tasks: background, planning, execution, and follow-up.

Because all unit rotations in the experimental group occurred after those in the baseline group, it is possible the relatively higher TSE performance of experimental units was caused by some factor(s) unrelated to *TSE Smart Card* usage. For instance, the increasing emphasis on intelligence collection and dissemination at the company level by JRTC and the Army over the course of the present investigation may have benefited later units more than earlier ones. This factor undoubtedly influenced the results to some extent, as units in the experimental group were found to have personnel with generally stronger TSE backgrounds. Experimental units were also more likely to have company intelligence teams and to have supporting TSE equipment like HIIDES and BATS.

To address this methodological shortcoming, the TSE performance of units using TSE job aids was compared to that of units not using job aids. Regardless of whether they were in the baseline or experimental group, units using TSE job aids tended to have much better TSE performance than units not using job aids. In fact, higher levels of statistical significance were found in the job aid usage comparisons than were found in the experimental-baseline comparisons. These results suggested that job aids like the *TSE Smart Card* can help to improve the TSE performance of all units, whether they have strong or weak backgrounds in TSE operations.

Job aid usage was generally low across both experimental and baseline units. Among units having an SOP for TSE operations, only 18.3% of baseline units and 25.6% of experimental units were observed to have used either the *TSE Smart Card* or other similar job aids, though this usage difference was found to be statistically significant (see Table 2). There are several possible reasons why job aid usage was not higher among experimental units. First, unit personnel may have simply chosen not the use them. Second, T/Ms may not have been able to see them being used. Third, the job aids that were provided to unit leaders may not have been distributed down to platoon and squad levels, suggesting the way training materials are distributed to units may need to be improved in future JRTC research projects.

Based on the overall results obtained in the present investigation, both the authors and members of the Council recommend continued use of the *TSE Smart Card* for units training at JRTC, as well as for units conducting TSE training at their home station. The continued use of the TSE Checklist at JRTC is also recommended, so T/Ms can systematically gather supporting TSE data to use in their AARs. In particular, it is recommended that the checklist be included in the next printing of JRTC's *T/M Handbook*.

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## Appendix A

**Enlarged View of the Tactical Site Exploitation Checklist** 

### TACTICAL SITE EXPLOITATION (TSE) CHECKLIST

Disclosure: Data collected with this form will be used for routine research purposes only. Information will not be used in whole or part in making any determination about an individual or unit. Information gathered will be used for statistical control purposes only and will not be disclosed to any unit undergoing rotations at the Joint Deadiness Training Contor

only and will not be disclosed to any unit undergoing rotations at the Joint Reduitess Training Center.		
SECTION I: GENERAL INFORMATION		
Dates Observed: FromTo		
Size of Unit Observed: BN SQDN CO BTRY TRP PLT SECT SQD DET		
Type of Unit Observed: IN AR SF RSTA CAV FA EN ADA AVN SC MI MP MS OD		
CHEM QM TC CA PSYOP Multiple Types Other Rotation Phase: STX FOF LF		
Type of Operation Observed: PLANNED OPPORTUNITY (Please Circle Type)		
SECTION II: UNIT INFORMATION		
1. Did the unit know and have a clear understanding of TSE operations? Yes No		
2. Did the unit have currently trained TSE teams? Yes No		
3a. Did the unit have an SOP for TSE operations? Yes No		
3b. What references were used to establish the unit SOP? (Please identify references)		
4. Did the unit SOP include an example of forms for: site survey, site assessment, site recording, and		
spot reports? Yes No No SOP		
5. Did the unit identify responsibilities of key unit Leaders such as: Cdr, XO, 1SG, PL, PSG, TSE Team		
Leaders? Yes No No SOP		
6. Did the unit have a Site Exploitation Checklist? Yes No		
7a. Did the unit have TSE equipment packed and readily available (durable and expendable items)?		
Yes No		
7b. If No, what equipment was missing?		
Comments:		
SECTION III: PLANNING PHASE		
1. Was TSE included in the unit mission plans at all echelons observed? Yes No		
2. Did the plan include planned and opportunity TSE operations? Yes No		

- Did the plan include site security, site survey, site assessment, site recording, evidence collection (bagging and tagging items), transport/turnover of items? NA (Please circle all that apply or NA)
- Did the plan include handling and transporting detainees and enemy prisoners of war?
- Did rehearsals include TSE operations? Yes personnel understand how to execute the plan? Yes No NA
- Did the unit develop and disseminate PIR? Yes No
- 7. Was the communications plan (to include within the TSE team) rehearsed? Yes No Unit had none
- 8. Did Leaders perform PCCs/PCIs of their TSE Kits? Yes No No kits available
- 9. Did units coordinate with other units operating in the AO? Nο
- 10. Did the unit have a plan for debriefings? Yes
- 11. Did Leaders and Soldiers understand their unit's TSE mission? Yes No
- 12. Did Soldiers and Leaders understand the difference between planned and opportunity TSE missions? Yes No

#### Comments:

2. 3a. 4. 5a. 6a. 7. 8. 9. 10.	SECTION IV: EXECUTION PHASE  Was the situation identified for TSE operations? Yes No Did units take advantage of TSE opportunities? Yes No Were conditions set for TSE operations? Yes No 3b. If no, why not? Did the unit make a survey and assessment of the site? Yes No Was the site recorded? Yes No 5b. If yes, how? Was the unit TSE SOP followed? Yes No 6b. If no, why not? Were interpreters and IA/ANA forces integrated? Yes No Were searches methodical, detailed, and professional? Yes No Searches not performed Were detainees/enemy prisoners of war searched and tactically questioned? Yes No Were detainees or enemy prisoners of war enrolled in the HIIDES? Yes No No system available Were vehicles secured and searched properly? Yes No Was evidence collected and processed properly? Yes No	
	Was the TSE operation executed in a timely manner? Yes No Did the unit orchestrate TSE in accordance to the combat situation (OEF vs. OIF)? Yes No	
	nments:	
<ul><li>2.</li><li>3.</li><li>4.</li><li>5.</li><li>6.</li><li>7a.</li></ul>	SECTION V: FOLLOW UP OPERATIONS  Were teams debriefed? Yes No 1b. If yes, who debriefed the teams?  Were collected packets reviewed (for completeness) before they were turned over? Yes No Were detainees and enemy prisoners of war properly processed and turned over? Yes No Was HIIDES downloaded into BATS? Yes No Did the unit have a Company Intelligence Team? Yes No Was collected information processed and disseminated to: company intelligence team, higher echelons, unit commander, S-2, S-3, lower echelons, and adjacent units? Yes No Did TSE operations interrupt or cause the unit to deviate from mission accomplishment? Yes No Please explain the above impact, if any:	
	Did friction points exist between the unit and higher echelons? Yes No	
8b.	If your answer is yes, please identify the friction points:	
9.	Identify TSE tasks that the unit should sustain:	
10.	Identify TSE tasks that the unit should improve:	
Comments:		
T/M	Initials Callsign Division/Task Force Rotation Number	
Version 3: 09/30/08		

## Appendix B

**Tactical Site Exploitation Research Plan** 



# DEPARTMENT OF THE ARMY JOINT READINESS TRAINING CENTER OPERATIONS GROUP 7260 ALABAMA AVENUE FORT POLK, LOUISIANA 71459-5314

ATZL-JR 27 August 2008

#### MEMORANDUM FOR RECORD

SUBJECT: Research Plan – Tactical Site Exploitation (TSE) – Joint Readiness Training Center Operations Group, Warrior Leadership Council, and U.S. Army Research Institute

- 1. Goal. To increase effective Army-wide Tactical Site Exploitation, IAW FM 2-22.3: Human Intelligence Collector Operations; FM 3-06.11: Combined Arms Operations in Urban Terrain; FM 3-21.20: The Infantry Battalion; FM 7-98: Operations in Low-Intensity Conflict; ST 3-90.15: Tactics, Techniques, and Procedures for Tactical Operations Involving Sensitive Sites; Site Exploitation Quick Reference Guide.
- 2. Concept of Research. The intent is to collect data on the effectiveness of TSE by units at the battalion, company, and platoon levels for nine consecutive rotations. The first rotation will be a pilot rotation to verify usability and suitability of the data collection instrument. We will collect and analyze baseline data for the next four rotations. Based on cumulative analysis of data after each rotation, revisions to data collection methods will be made if needed. The Warrior Leadership Council will then propose an intervention to be introduced to unit commanders and leaders prior to the next four rotations. An example of an intervention may be the pocket-sized Site Exploitation Quick Reference Guide to assist the commander, staff member, or leader in the planning and execution of TSE operations. To gauge the overall effectiveness of the intervention, we will statistically compare the effectiveness of TSE operations between the last four and the first four rotations.
- 3. Scope. Echelons of interest are Battalions, Squadrons, Batteries, Companies, Troops, and Platoons with the Battery, Company, and Troop being the center of interest. Units will be observed during the Situational Training, Live Fire, and Force-on-Force phases of the rotation. The research will focus on unit information, planning, execution, and follow up operations.
- 4. Data Collection. O/Cs at each echelon will collect data using a checklist developed and approved by the Warrior Leadership Council. Measures of interest include the following:
  - a. Unit Information.
    - (1) Did the unit have currently trained TSE teams?
    - (2) Were Leaders/Soldiers familiar with their unit's SOP for TSE?

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- (3) Did the unit SOP include an example of forms, site survey, site assessment, site recording, and spot reports?
  - (4) Did unit SOP identify duties and responsibilities of key Leaders?
  - (5) Did the unit have a Site Exploitation Checklist?
  - (6) Did individual Leaders/Soldiers understand how to execute TSE operations?
- (7) Did the unit have TSE equipment packed and readily available (durable and expendable items)?

#### b. Planning.

- (1) Was TSE included in the unit mission plans at all echelons observed?
- (2) Did the plan include planned and opportunity TSE operations?
- (3) Did the plan include site security, site survey, recording site, gathering (bagging and tagging), and transport and turnover of items?
  - (4) Was the handling of detainees and enemy prisoners of war included in the plan?
  - (5) Was the TSE plan rehearsed at all echelons observed?
- (6) Did rehearsals include TSE operations for raids, TCP/ECP operations, cordon and search, convoy security, route clearing operations, and IED detonation/detection sites?
  - (7) Did the unit rehearse actions on contact and site security?
- (8) Did tactical operations center and command post personnel understand how to execute the plan?
  - (9) Did the unit develop and disseminate PIR?
  - (10) Was the communications plan rehearsed?
  - (11) Were PCCs and PCIs to include TSE Kits performed?
  - (12) Did units coordinate with other units operating in the AO?

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- (13) Were interpreters available for TSE operations and included in rehearsal?
- (14) Did the unit have a plan for transporting detainees and enemy prisoners of war?
- (15) Did the unit have a plan for the turnover of bagged and tagged items and a debriefing plan?
  - (16) Did most Leaders and Soldiers understand their unit's TSE mission?

#### c. Execution.

- (1) Did units take advantage of TSE opportunities?
- (2) Was the situation identified and conditions set for TSE operations?
- (3) Was the site reconned, secured, and recorded?
- (4) Did the unit make a survey/assessment of the site?
- (5) Was the unit SOP followed?
- (6) Did the unit conduct TSE operations to standards?
- (7) Were interpreters, IA, and ANA forces integrated?
- (8) Were searches methodical, detailed, and professional?
- (9) Were detainees/enemy prisoners of war searched and processed properly?
- (10) Were vehicles secured and searched properly?
- (11) Were items gathered, tagged, and bagged properly?
- (12) Were timely spot reports communicated?
- (13) Was the TSE operation executed in accordance with the established time line?
- (14) Did the unit orchestrate TSE in accordance to the combat situation (OEF vs. OIF vs. Major Combat Operations)?

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- d. Follow Up Operations.
  - (1) Were teams debriefed?
  - (2) Were collected packets reviewed (for completeness) before they were turned over?
  - (3) Were collected items turned over to and reviewed by the proper individual?
  - (4) Were detainees and enemy prisoners of war properly processed and turned over?
- (5) Was collected information processed and disseminated to: unit commander, staff sections, higher echelons, lower echelons, adjacent units?
- (6) Did the unit use any performance tools or aids (TSE guide, checklist) while accomplishing TSE operations?
- (7) Did TSE operations interrupt or cause the unit to deviate from mission accomplishment?
  - (8) Did friction points exist between the unit and higher echelons?
  - (9) Identify TSE tasks that the unit should sustain.
  - (10) Identify TSE tasks that the unit should improve.

#### 5. Responsibilities.

- a. Operations Group Deputy Commander and Command Sergeant Major shall provide Command oversight to the TSE investigation.
- b. The ARI technical representative shall provide technical and scientific support to the Warrior Leadership Council, analyze data after each rotation, and provide a written report of the research findings for review by the Council and Commander Operations Group following the conclusion of the investigation.
- c. The ARI Liaison Officer shall provide administrative support and warrior experience to the Warrior Leadership Council, develop and revise the research plan, develop a data collection form to be used by O/Cs, and provide local coordination for plan approval and execution.

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- d. O/Cs within each Division shall be responsible for collecting data on measures of interest.
- e. Division members of the Warrior Leadership Council shall be responsible for insuring O/C data collection forms in their respective Division provide satisfactory data on measures of interest as outlined in Paragraph 4.
- f. Through its regularly scheduled meetings after each rotation, the Warrior Leadership Council shall insure consistency and continuity of data collection efforts across Divisions.
- 6. Points of Contact. Major Michael Coerper, Warrior Leadership Council Chairman, 531-0132; <a href="michael.f.coerper@us.army.mil">michael.f.coerper@us.army.mil</a>; First Sergeant Jeffery Johnson, Warrior Leadership Council Vice Chairman, 531-8299; <a href="majority:jeffery.johnson2@us.army.mil">jeffery.johnson2@us.army.mil</a>; Bill Gates, U.S. Army Research Institute, Liaison Officer, 531-1248; <a href="majority:julius.gates@us.army.mil">julius.gates@us.army.mil</a>.

ROBERT GALLAGHER Command Sergeant Major, USA ARTHUR A. KANDARIAN COL, IN Deputy Commander

## Appendix C

List of Acronyms and Abbreviations

**1SG** First Sergeant

AAR After Action Review
ADA Air Defense Artillery
ANA Afghan National Army
AO Area of Operation

**AR** Armor

**ARI** U.S. Army Research Institute for the Behavioral and Social Sciences

**AVN** Aviation

**BATS** Biometric Automated Toolset System

**BN** Battalion BTRY Battery

CA Civil Affairs
CAV Cavalry
CDR Commander
CHEM Chemical
CO Company

COIST Company Intelligence Support Team

COL Colonel

**DET** Detachment

**ECP** Entry Control Point

**EN** Engineer

**EPW** Enemy Prisoner of War

FM Field Artillery
FM Field Manual
FOF Force on Force

**GTA** Graphic Training Aid

HIIDES Handheld Interagency Identity Detection Equipment System

IA Iraqi Army

**IAW** In Accordance With

**IED** Improvised Explosive Device

**IN** Infantry

**JRTC** Joint Readiness Training Center

**LF** Live Fire

MI Military Intelligence
MP Military Police
MS Medical Service
MTT Mobile Training Team

NA Not Applicable

**OD** Ordnance

OEF Operation Enduring Freedom
OIF Operation Iraqi Freedom

PCC Pre-Combat Check
PCI Pre-Combat Inspection

**PIR** Primary Intelligence Requirements

PL Platoon Leader

PLT Platoon

**PSG** Platoon Sergeant

**PSYOP** Psychological Operations

QM Quartermaster

**RDECOM** U.S. Army Research, Development, and Engineering Command

**RSTA** Reconnaissance, Surveillance, and Target Acquisition

SC Signal Corps SECT Section

**SF** Special Forces

SMA Sergeant Major of the Army SOP Standing Operating Procedure

**SQD** Squad SQDN Squadron

STX Situational Training Exercise

TC Transportation Corps
TCP Traffic Control Point
TECHINT Technical Intelligence

**T/M** Trainer/Mentor

**TRADOC** U.S. Army Training and Doctrine Command

**TRP** Troop

**TSE** Tactical Site Exploitation

**XO** Executive Officer